

AMENDED CLAIM SET:

1. (currently amended) A high-density detergent composition comprising 10 to 60% by weight of a surfactant composition having a weight ratio of an anionic surfactant to a nonionic surfactant of 4:10 or more and 10:0 or less and 15% or less by weight of a water-soluble inorganic salt,

B2 wherein the high-density detergent composition has a bulk density of from 600 to 1200 g/L, and has a total summation of a product of a mass base frequency W_i and a dissolving rate V_i of each group of classified granules obtained by classifying detergent granules by using a classifier, which satisfies the following formula (A):

$$\Sigma(W_i \cdot V_i) \geq 95(\%) \quad (A)$$

and wherein a mass base frequency of the classified granules having a size of less than 125 μ is 0.1 or less, wherein the classifier comprises a series of sieves each having a sieve-opening sieve-openings respectively of 2000 μ m, 1410 μ m, 1000 μ m, 710 μ m, 500 μ m, 355 μ m, 250 μ m, 180 μ m, and 125 μ m, and a receiver, and the dissolving rate V_i the dissolving rate V_i is determined under the following measurement conditions:

supplying 1.000 g \pm 0.010 g of a sample to 1.00 L \pm 0.03 L of water at 5°C \pm 0.5°C having a water hardness of 4°DH, stirring in a 1 L beaker of which inner diameter is 105 mm, with a cylindrical stirring rod of which length is 35 mm and diameter is 8 mm, at a rotational speed of 800 rpm for 120 seconds, and thereafter filtering insoluble remnants by a standard sieve having a sieve-opening of 300 μ m as defined according to JIS Z 8801, wherein the dissolving rate V_i of the classified granules is calculated by the following formula (a), i being each group of the classified granules:

$$V_i = (1 - T_i / S_i) \times 100(\%) \quad (a)$$

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wherein S_i is a weight (g) of each group of the classified granules supplied; and T_i is a dry weight (g) of the insoluble remnants of each group of the classified granules remaining on the sieve after filtration.

2. (currently amended) A high-density detergent composition comprising 10 to 60% by weight of a surfactant composition having a weight ratio of an anionic surfactant to a nonionic surfactant of 0:10 or more and less than 4:10 and 15% or less by weight of a water-soluble inorganic salt,

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the detergent composition having a bulk density of from 600 to 1200 g/L, wherein the high-density detergent composition has a total summation of a product of a mass base frequency W_i of each group of classified granules ~~obtained by classifying detergent granules by using the classifier as defined in claim 1~~ and a dissolving rate V_i of each group of the classified granules ~~determined under the measurement conditions as defined in claim 1~~, which satisfies the following formula (B):

$$\Sigma(W_i \cdot V_i) \geq 97(\%) \quad (B)$$

and wherein a mass base frequency of the classified granules having a size of less than 125 μ is 0.08 or less, wherein the classifier comprises a series of sieves having sieve-openings respectively of 2000 μ m, 1410 μ m, 1000 μ m, 710 μ m, 500 μ m, 355 μ m, 250 μ m, 180 μ m, and 125 μ m, and a receiver, and the dissolving rate V_i the dissolving rate V_i is determined under the following measurement conditions:

supplying 1.000 g \pm 0.010 g of a sample to 1.00 L \pm 0.03 L of water at 5°C \pm 0.5°C having a water hardness of 4°DH, stirring in a 1 L beaker of which inner diameter is 105 mm, with a cylindrical stirring rod of which length is 35 mm and diameter is 8 mm, at a rotational speed of 800 rpm for 120 seconds, and thereafter filtering insoluble remnants by a standard sieve having a sieve-opening of 300 μ m as defined according to JIS Z 8801, wherein the dissolving

rate V_i of the classified granules is calculated by the following formula (a), i being each group of the classified granules:

$$V_i = (1 - T_i / S_i) \times 100(\%) \quad (a)$$

wherein S_i is a weight (g) of each group of the classified granules supplied; and T_i is a dry weight (g) of the insoluble remnants of each group of the classified granules remaining on the sieve after filtration.

3. (original) A process for preparing the high-density detergent composition of claim 1, comprising subjecting unclassified detergent granules comprising 10 to 60% by weight of a surfactant composition to classification operation; and adjusting a particle size of each group of the resulting classified granules, such that the formula (A) as defined in claim 1 is satisfied, and that a mass based frequency of the classified granules having a size of less than 125 μm is 0.1 or less.

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4. (original) A process for preparing the high-density detergent composition of claim 2, comprising subjecting unclassified detergent granules comprising 10 to 60% by weight of a surfactant composition to classification operation; and adjusting a particle size of each group of the resulting classified granules, such that the formula (B) as defined in claim 2 is satisfied, and that a mass based frequency of the classified granules having a size of less than 125 μm is 0.08 or less.

5. (new) A high-density detergent composition as in claim 1 or claim 2, wherein the counterions in said anionic surfactant comprise 5% by weight or more potassium counterions.

6. (new) A high-density detergent composition as in claim 5, wherein said anionic surfactant comprises 1 to 50% by weight of said detergent composition.

7. (new) A high-density detergent composition as in claim 6, wherein said anionic surfactant comprises 5 to 30% by weight of said detergent composition.

8. (new) A high-density detergent composition as in claim 1 or claim 2, wherein said nonionic surfactant is a polyoxyethylene-polyoxypropylene-polyoxyethylene alkyl ether.

9. (new) A high-density detergent composition as in claim 1 or claim 2, wherein said water-soluble inorganic salt is selected from the group consisting of carbonates, hydrogencarbonates, silicates, sulfates, sulfites, and phosphates.

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10. (new) A high-density detergent composition as in claim 9, wherein said water-soluble inorganic salt is sodium carbonate.

11. (new) A high-density detergent composition as in claim 1 or claim 2, comprising sodium carbonate and alkali metal silicate, wherein a total sum of the sodium carbonate and the alkali metal silicate is 19% or more by weight of the detergent composition.
